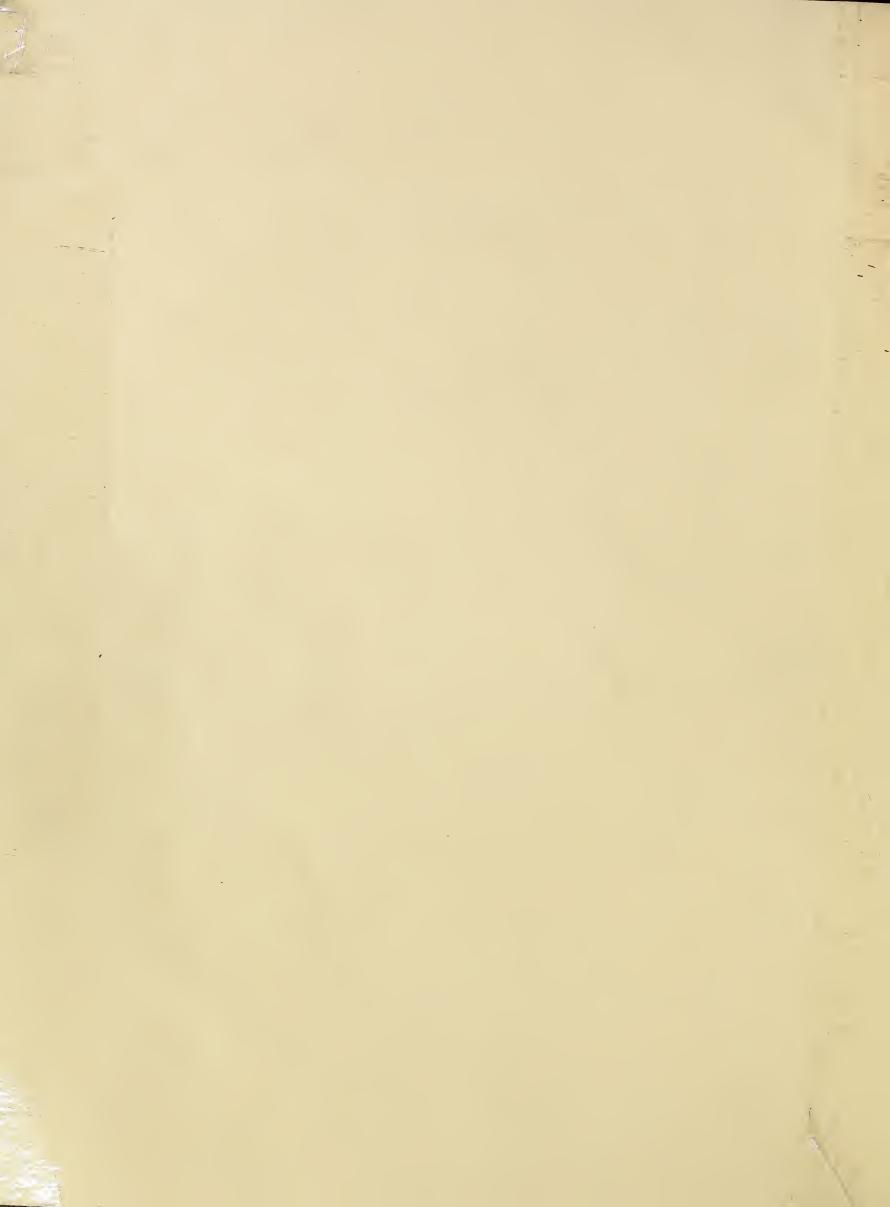
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## THE FARM INDEX

**ECONOMIC RESEARCH SERVICE** 

U.S. DEPARTMENT OF AGRICULTURE

**NOVEMBER 1965** 



4/11

U. S. DEPT. OF AGRICULTURE

DEC 8 1965

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**OUTLOOK** 1966

CHART STORY OF THE YEAR AHEAD FOR: FARMING, MARKETING, THE FOREIGN MARKET, THE CONSUMER

ALSO IN THIS ISSUE: THE BORDER
OF BOOM - DECISION BY FORMULA MIDDLEMEN IN THE MIDDLE OF CHANGE ISLAND BOON: THE SUNGLASS ECONOMY



# economic trends

			1964		1965		
ITEM	UNIT OR BASE PERIOD	'57-'59 AVERAGE	YEAR	SEPTEMBER	JULY	AUGUST	SEPTEMBER
Prices:  Prices received by farmers Crops Livestock and products Prices paid, interest, taxes and wage rates Family living items Production items Parity ratio Wholesale prices, all commodities Commodities other than farm and food Farm products Food, processed Consumer price index, all items	1910-14 = 100 1910-14 = 100 1910-14 = 100 1910-14 = 100 1910-14 = 100 1910-14 = 100 1957-59 = 100 1957-59 = 100 1957-59 = 100 1957-59 = 100 1957-59 = 100 1957-59 = 100	242 223 258 293 286 262 83 —	236 238 235 313 300 270 76 100.5 101.2 94.3 101.0 108.1	237 229 244 313 299 270 76 100.7 101.1 95.7 102.2 108.4	253 236 269 323 307 278 78 102.9 102.5 100.0 106.6 110.2	250 224 272 321 305 277 78 102.9 102.7 99.1 106.7 110.0	250 224 271 321 305 277 78 103.0 102.7 99.5 106.7
Food  Farm Food Market Basket:  Retail cost Farm value Farm-retail spread Farmers' share of retail cost	1957-59 == 100  Dollars Dollars Dollars Per cent	983 388 595 39	1,015 373 642 37	1,028 386 642 38	110.9 1,072 423 649 39	110.1 1,060 420 640 40	_ _ _ _
Farm Income:  Volume of farm marketings  Cash receipts from farm marketings  Crops  Livestock and products  Realized gross income <sup>2</sup> Farm production expenses <sup>2</sup> Realized net income <sup>2</sup>	1957-59 == 100 Million dollars Million dollars Million dollars Billion dollars Billion dollars Billion dollars	32,247 13,766 18,481 —	118 36,899 17,135 19,764 42.2 29.3 12.9	139 3,645 1,774 1,871 42.3 29.2 13.1	114 3,046 1,297 1,749 —	118 3,224 1,336 1,888 —	138 3,800 1,800 2,000 44.5 30.3 14.2
Agricultural Trade:     Agricultural exports     Agricultural imports Land Values:	Million dollars Million dollars	4,105 3,977	6,347 4,082	495 338	548 261	459 319	— — —
Average value per acre Total value of farm real estate  Gross National Product 2	1957-59 == 100 Billion dollars Billion dollars		_	135 <sup>3</sup> 154.9 <sup>3</sup>	139 <sup>+</sup> 159.4 <sup>+</sup>	Ξ	
Consumption <sup>2</sup> Investment <sup>2</sup> Government expenditures <sup>2</sup> Net exports <sup>2</sup>	Billion dollars Billion dollars Billion dollars Billion dollars Billion dollars	457.3 294.2 68.0 92.4 2.7	628.7 398.9 92.9 128.4 8.6	634.8 404.6 92.6 128.7 6.8			676.9 432.2 101.8 135.1 7.8
Income and Spending: 5 Personal income, annual rate Total retail sales, monthly rate Retail sales of food group, monthly rate Employment and Wages: 5	Billion dollars Million dollars Million dollars	365.3 17,105 4,159	495.0 21,802 5,183	501.7 22,254 5,250	530.5 23,743 5,546	532.0 23,653 5,541	545.3 23,344 —
Total civilian employment Agricultural Rate of unemployment Workweek in manufacturing Hourly earnings in manufacturing, unadjusted Industrial Production 5	Millions Millions Per cent Hours Dollars 1957-59 = 100	64.9 6.0 5.5 39.8 2.12	70.4 4.8 5.2 40.7 2.53 132	70.5 4.8 5.1 40.5 2.57	72.8 4.7 4.5 40.9 2.61 144	72.4 4.6 4.5 40.9 2.60 144	72.2 4.4 4.4 40.9 2.63 143
Manufacturers' Shipments and Inventories: 5 Total shipments, monthly rate Total inventories, book value end of month Total new orders, monthly rate	Million dollars Million dollars Million dollars	28,745 51,549 28,365	37,129 62,944 37,697	37,312 61,019 38,018	41,452 65,394 41,846	40,522 65,807 40,893	

<sup>1</sup> Average annual quantities of farm food products purchased by urban wage-earner and clerical-worker households (including those of single workers living alone) in 1960-61—estimated monthly. <sup>2</sup> Annual rates seasonally adjusted third quarter. <sup>3</sup> As of July 1. <sup>4</sup> As of March 1. <sup>5</sup> Seasonally adjusted.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Industry Survey, Business News Reports, Advance Retail Sales Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).

### **COMMODITY HIGHLIGHTS**

Farm prospects for 1966 are being spelled out this month at the annual National Agricultural Outlook Conference in Washington. Here are some of the developments anticipated:

• Realized net farm income in 1966 may be slightly above the \$14 billion expected for 1965—possibly a quarter to a half billion dollars. Income would be the highest since 1951.

Realized net income per farm in 1966 is likely to be record-high, up from the \$4,100-plus per farm now in sight for 1965.

Cash receipts from marketings of livestock and livestock products likely will be higher than this year. Receipts from crop marketings will probably be lower than in 1965. But this will be more than offset by a sharp increase in direct government payments to farmers under the 1966 Wheat and Cotton Programs and the new Cropland Adjustment Program. However, the increase in government payments will not boost the total costs of farm commodity programs.

- Prices of fed cattle, after some temporary weakening into winter, will likely equal or exceed year-earlier levels well into 1966. If feeders' October 1 plans to increase marketings 5 per cent over the fourth quarter of last year are realized, prices may go somewhat below recent levels. However, placements on feed this fall may be no larger than last year; good grazing conditions may result in some holding back of feeder animals. A gain in marketings and stability in placements would result in a January 1 inventory of cattle on feed only slightly above a year earlier. This would suggest a strong late-winter market for fed cattle.
- Sow farrowings may regain year-earlier levels by this winter, after declining for more than a year. However, hog slaughter will likely continue below year-earlier levels at least into the fall of 1966, indicating sustained price strength for hogs through most of 1966.

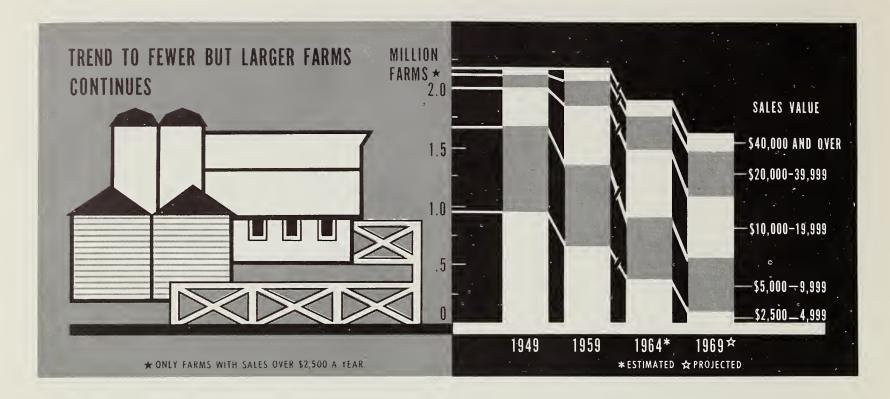
If hog producers next year increase late spring and fall farrowings sharply, prices late in 1966 and in 1967 likely would be down substantially.

• Milk production in 1966 is likely to total slightly larger than the 125.5 billion pounds expected for 1965. The number of milk cows is declining, but production per cow rises to new records each year. Larger marketings are expected to keep prices close to price support levels. Cash receipts from farm sales of milk and cream may rise above the record level of \$5.1 billion expected this year.

Government price support purchases and export programs next year are expected to remove close to this year's 6.5 billion pounds milk equivalent (5 per cent of production) from commercial supplies. Exports and donations under government programs will probably keep year-end stocks near 1965 low year-end levels.

- Egg production in 1966 is likely to be up some from the 178 million cases currently estimated for 1965. Output probably will be a little below 1965 levels in the first half and above in the second half. Egg prices are likely to open the year substantially above and close the year below the 1965 levels. Prices received by farmers for all of 1966 may average close to the 33 cents per dozen in prospect this year.
- Broiler production probably will keep increasing in 1966. Substantially larger output in the first half of 1966 will be encouraged by the rapid build-up under way in broiler hatchery supply flocks and the prospect of lower feed prices and reduced red meat supplies. Production may be so large that broiler prices will average below a year earlier.

(For the outlook for feed grains, wheat and cotton see the special supplement to the Handbook of Agricultural Charts, A.H. No. 300 beginning on page 9.)



### THE BORDER OF BOOM

The \$10,000 gross sales figure is the economic border of the expanding and contracting sectors of U.S. agriculture. While farm numbers on the minus side of \$10,000 have declined, those on the plus side are gaining.

Numbers alone can't tell the complete story. The numbers show 2.4 million farms disappearing from the U.S. agricultural scene between 1939 and 1964.

But the story that remains to be told is: Which farms vanished, which ones remained.

A recent ERS study attempts to locate the economic border line between the farms that are losing ground and the ones that are growing in number and importance.

Of the 2.4 million farms that disappeared, about 2.3 million—nearly 95 per cent—were small farms producing less than \$2,500 in gross sales each (based on 1959 prices). The most marked decline of such farms occurred in the South where share-cropper units made up one-fourth of all the farms that went out of business during the 15-year period, 1944-1959. By 1963 only about 1.5 million of these small \$2,500-and-un-

der farms were left, most of them in the part-time or part-retirement category. Their operators derived about 80 per cent of their total incomes from nonfarm sources.

Farms with \$2,500 to \$9,999 in gross sales also decreased over the years, but many of these farms did not go out of business. Instead, they moved upward into the larger-size farm groups producing \$10,000 or more in sales.

As closely as it can be located, this \$10,000 figure is the economic border line between the contracting and expanding sectors of agriculture today. On the minus side of this figure farm numbers are declining; on the plus side, they are expanding rapidly.

Between 1939 and 1959 the number of farms with \$10,000 or more in gross sales rose two and a half times while their share of total farm marketings more than tripled. In 1959 farms in this cate-

gory made up about 20 per cent of all farms as contrasted with only 5.4 per cent of all farms in 1939; they accounted for more than 71 per cent of total farm marketings compared with only 39 per cent 20 years earlier.

But while farm production in the U.S. is concentrating on the plus side of the \$10,000 line, it is not concentrating on fewer farms. The farms in the \$10,000-and-up sales category had 211 per cent more marketings in 1959 than in 1939, but this category also had 159 per cent more farms. Average production per farm rose only about 20 per cent.

This fact is even more pronounced in the group of farms with \$40,000 or more in marketings. During the fifties this group of farms expanded their output by 170 per cent while expanding their number by 200 per cent. Output per farm actually decreased by 16 per cent.

What do all these farm figures indicate concerning the nature and direction of postwar agriculture in the U.S.?

First of all, production is concentrating not on a smaller number of large farms but, on the contrary, on a larger number of proficient farms with \$10,000 or more in sales.

Second, these changes are likely to continue in the future. Economists figure that in the next five years the number of farms in the \$10,000-plus sales category will continue to grow though the rate of increase may slow down. On the other hand, the number of farms with less than \$10,000 in sales likely will decrease at about the same rate as in the last decade. (1)

#### Family Farms Make Up 88 Per Cent of All Farms With \$10,000-Plus in Sales

Far from being past its heyday, the family farm is firmly entrenched in the No. 1 spot in agriculture. A rough estimate of farm numbers in 1964 showed that family-operated farms now comprise about 96 per cent of all farms and account for roughly 73 per cent of total marketings. Back in 1949 these proportions were about 95 and 66 per cent, respectively.

Even more important is the fact that family farms producing \$10,-000 or more in gross sales are the most rapidly expanding part of the farm economy. Between 1949 and 1964, the number of family-operated farms in this category rose 157 per cent. Family farms now make up nearly 88 per cent of all farms with \$10,000 or more in sales and account for nearly 67 per cent of their total production.

Among the larger farms—those with \$40,000 or more in sales—the rapid increase in the proportion of family farms is even more pronounced. A rough estimate indicates that less than one-fifth of the farms in this group were family operated in 1949, compared with almost two-fifths in 1959. (2)

#### Owning the Land May Boost the Ego Far More Than It Does Farm Income

Small farms and low farm incomes are typical of the Ozarks, though the size of farms is gradually increasing. For example, the number of farms with gross sales of over \$5,000 increased from 426 in 1950 to 1,161 in 1959 in 10 Ozark counties in eastern Missouri.

Research in the area indicated the size and type of unit needed for net farm incomes of at least \$2,000.

Economists studying problems in the area wanted answers to two questions: "How do farmers with net farm incomes of \$2,000 gather the necessary resources to increase the unit, and how do they get started in farming in the first place?"

The answers were sought through a joint research project of the Missouri Agricultural Experiment Station and the Economic Research Service.

The study was limited to farmers who were under 45 years of age, worked on a nonfarm job less than 100 days a year and had gross sales of \$5,000 or more from their farm. The \$5,000 figure was the basis of the \$2,000 net, since

farm business expenses are about 60 per cent of gross sales.

The average operator in the study had been farming some years, long enough to increase the size of his farm to 525 acres. About 190 acres were in cropland. He had an investment of nearly \$60,000 and enough capital so that debt was only 15 per cent of his investment.

Rented assets were another 5 per cent of total investment. Live-stock—beef cow herds and feeder pigs—was important on most of the farms.

Twenty-three of the 49 farmers interviewed had inherited or expected to inherit part of the land they farmed. And 11 of them had started out as renters.

The men who began as owners—carrying a substantial debt right from the start—took several years to get to the point where they could add to their original holdings.

Some of the men started in a partnership on a going farm and were able to develop an adequate operation quickly—one in only three years. Most, however, took considerably longer.

The top fourth of the farmers in the study operated units with an average value of \$100,800 and a net income running to \$8,538.

FEWER AND LARGER FARMS: That's been the trend for some time now and indications are it's likely to continue. By the end of 1965 researchers expect the number of farms to be under 3.4 million and farmland to total less than 1.2 billion acres. The rate of decline in the number of farms and farmland from 1964 to 1965 is about the same as in recent years. As a result of these changes, the "average" farm operator now runs a farm of 341 acres—nearly a fifth larger than the average in 1959. (4)

Year	Farms	Land in farms	Average size of farm
	Thousands	Thousand acres	Acres
1959	4,105	1,182,658	288
1960	3,956	1,177,565	298
1961	3,818	1,172,910	307
1962	3,695	1,168,115	316
1963	3,580	1,163,180	325
1964	3,479	1,158,505	333
1965 <sup>1</sup>	3,383	1,154,545	341
<sup>1</sup> Preliminary			

Whether at the bottom or the top of the group in size of operation, nearly all the men had increased their investment in the years they had farmed.

Thirty-two of the operators had substantial help from their families to get them started. It amounted to anything from gifts of farmland to buildings and working partnerships. The other 17 had little or no family help. They either saved the necessary capital from nonfarm earnings or rented land.

The men who had no assistance from families turned to more intensive livestock enterprises, such as hogs. For the others, a beef enterprise was more important.

Inheritance and other aid at the outset by the family made it possible for the operator to get started on a larger scale and to do it sooner. But it also led to more extensive types of farming. Thus the income available to the family, though initially higher, changes little over the years, compared with the farm of men who started without such help. (3)

### Economists Use New Programing Tool To Predict Farm Output Prices

What is likely to be the farmers' production response to changes in prices, technology, government programs and other forces? Why do farmers react as they do? How will they react in the future to economic, political and social changes?

A relatively new technique called recursive programing may help economists to answer some of these questions with reasonable accuracy.

Recursive programing (RP) can be simply defined as linear programing (LP) carried a step further. A typical problem solved with LP is, "How should a farm or region allocate its resources so as to make the most money?" The allocation plan is based on a set of conditions which might apply to any year.

In contrast, the RP technique uses LP to generate a series of specific year-to-year adjustments farmers may make to different economic, technological and other conditions. Calculations are first made for next year, say 1966, based on the farmers' current outlook and use of resources (the recursive feature). The estimates for 1966 are then used as the point of departure for the 1967 problem, and so on.

Linear programing and recursive programing differ in another way, too. The results of the typical LP model show what "could be done," not necessarily what farmers "will do." The RP models tested so far are more predictive, not only because they view adjustments in a year-to-year setting, but also because they include special limits that do not permit crop acreages to depart too far from those of the preceding year.

Derived from information on actual changes in the past, these limits recognize that farmers are unable to make as much money as fast as the usual LP model suggests. Also, the limits take into account the fact that farmers may have goals and preferences other than maximizing profit today. These characteristics of RP allow economists to project the likely farm output and prices several years ahead.

Another big advantage of recursive programing over the statistical techniques used in the past is that RP solutions indicate why certain changes occur. This is because RP models are developed using basic production relationships and the interplay of crop returns and restraints (such as irrigation water, capital and so forth).

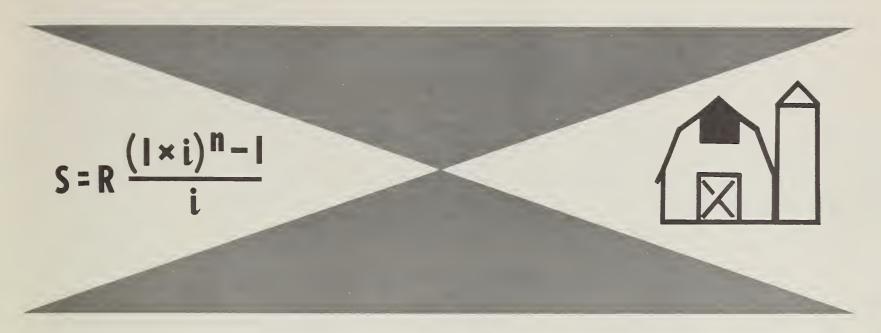
Also, RP models can be used to provide estimates for all crops, whether or not they are produced under allotments or other government programs. Statistical tools, which assume a continuation of previous conditions, have limited use except for estimating production of crops not directly affected by changes in government programs. (6)

FARM TRUCK: IS BUYING THE ANSWER? The costs of owning and operating a truck are figured by estimating depreciation on the new or current value and then adding allowances for the other fixed annual costs—repairs, shelter, insurance, taxes and interest. Divide this by the annual mileage to find the cost per mile. Add the per hour operating costs—gas, oil, grease, antifreeze—to find the total cost per mile. If the farmer with limited need for a vehicle can borrow or rent a neighbor's truck at peak seasons he probably will be better off. Figures used to illustrate truck costs are averages of the replies to a 1960 survey of wheat farms in northeastern Colorado. (5)



Size in tons	1/2	3/4	1	2
Cost when new	\$2,172	\$2,481	\$2,924	\$4,475
Average value in 1960	\$1,303	\$1,489	\$1,754	\$2,685
Miles of use annually	8,926	5,686	4,475	3,841
Annual fixed costs:				
Depreciation 1	\$157.96	\$132.32	\$155.95	\$198.89
Repairs	39.27	51.17	47.45	42.42
Shelter, insurance				
taxes	89.96	99.17	117.00	179.01
Interest <sup>2</sup>	104.24	119.12	140.32	214.80
Total	\$388.43	\$401.78	\$460.72	\$635.12
Cents per mile:				
Fixed costs	4.4	7.1	9.7	16.5
Operating costs	4.0	4.2	5.0	7.0
Total	8.4	11.3	14.7	23.5

<sup>1</sup> Cost when new minus 20 per cent—remainder divided by estimated years of use. <sup>2</sup> Eight per cent.



### **DECISION BY FORMULA**

Land values rising: Should the farmer sell today or wait for a few years? The formula can help him weigh today's profit against tomorrow's gain. The article explains how to translate the algebra into facts for the farm.

Should the farmer sell his property now or hold out for future gains? Here's one approach to the problem:

The operator's farm is worth \$50,000 and he earns 5 per cent on his investment—an annual return on real estate of \$2,500.

Suppose a farmer, for example, having paid about \$30,000 for his farm, sells it for \$50,000. He pays \$4,000 in capital gains tax and other costs of transfer, leaving a net of \$46,000. The farmer presumably has some other profitable use for his labor and non-real estate capital, a use that will yield a return at least equal to the one earned currently.

The farmer should sell if he expects *no* rise in land values and can get an annual return from the \$46,000 in excess of \$2,500 from some other investment.

The more likely expectation, however, is for rising land values.

The farmer may estimate, for example, he can sell the farm for \$100,000 in 10 years, double the current worth and double the capital gain.

In assessing the most profitable

course, the farmer needs to subtract the additional capital gains tax, along with any anticipated increase in local property taxes, from the extra \$50,000. If he estimates property taxes for the period at \$6,000, his net sales value for the farm in 10 years would be \$90,000—\$100,000 minus \$6,000 for property taxes over 10 years and \$4,000 in capital gains tax. Then the farmer subtracts the \$46,000 he could have earned by selling the farm today, leaving \$44,000, the additional net return received by waiting 10 years.

Was the 10-year wait worth it? Yes, on paper at least. But it takes a few more calculations to see why.

This is the formula in its raw state (information published in annuity tables or provided by a bank will do most of the work):

$$S = R \frac{(1+i)^n - 1}{i}$$

"S" equals the desired sum at the end of the investment period, in this case \$44,000. "R" equals the amount that must be invested each year to get the desired sum. The "i" stands for the anticipated interest rate, 7.5 per cent. And "n" is the number of investment periods, or 10 years. The relatively high interest rate of 7.5 per cent was chosen because of the element of chance in achieving the estimated \$100,000 sales value in 10 years.

The annuity tables solve the first step of the calculations, providing a formula that looks this: \$44,000 = R (14.1470). With this information, R = \$44,000 over (divided by) 14.1470. The answer is: "R" equals \$3,110.

Thus, before it would be profitable to sell out, the farmer must be able to earn \$5,610 a year on the \$46,000 he got for his farm. The \$5,610 is \$3,110 plus the \$2,500 he currently gets from the property.

It means the farmer must reasonably expect a return of 12.2 per cent on the amount he puts into some other investment.

At such a level the alternative investment maintains his current return and provides an excess which, when reinvested, would more than equal the additional capital gains he could expect.

The theory doesn't encompass all the facts. For one reason or another, the farmer may find he can't afford to hold onto the property long enough to fully realize his expectations.

Also, the calculations don't include an adjustment for rising costs of running the farm, except for the increase in property taxes. (7)

The Chartbook Supplement which follows on the next eight pages can be removed from the INDEX and used separately.

#### ERS Establishes New Division

Greater emphasis on research dealing with the development of the rural economy and the uses of our natural resources will result from reorganization of the Economic Research Service.

A new division has been established, an existing division has been reorganized and the work of others has been realigned.

The Economic Research Service is headed by Dr. M. L. Upchurch, who assumed the position of Administrator when Nathan M. Koffsky was appointed overall Director of Agricultural Economics for the Department of Agriculture. Mr. Koffsky succeeded Dr. John A. Schnittker, the present Under Secretary of Agriculture.

Under the direction of Dr. George S. Tolley the new **Economic Development Division** will make studies of the well-being and opportunities of rural people, area development in relation to regional and national development and the role of local government and other organizations in the growth process. Special emphasis will be given to problems of upgrading living conditions in rural areas.

With the transfer of its Area Economic Development Branch to the new division, the Resource Development Economics Division has been reorganized into the Natural Resource Economics Division. During Director Harry A. Steele's assignment to the Staff Economists Group, Dr. Raymond D. Vlasin is directing this division's expanding program of research on the economic and institutional aspects of the use, conservation, development, management and control of natural resources.

Among the new projects of this division is a broad interregional study of the economics of water use and conservation in agriculture. While improving our ability to measure the value of water in different uses and areas, the new research will stress identification of profitable water conservation techniques.

Though not affected to the same extent by the reorganization, the other divisions of ERS are also shifting the emphases of their research programs in line with the changing agricultural scene. Other divisons of ERS are:

Marketing Economics Division—Dr. Kenneth E. Ogren, Director. This group is analyzing the structure of the U.S. marketing system to help find ways of strengthening the farmer's bargaining power. Also, they are beginning a major new study of away-from-home eating places as a growing type of market for farm products.

Economic and Statistical Analysis Division—Dr. James P. Cavin, Director. Familiar to everyone in agriculture are the commodity situation and outlook reports of this division. Work is now being stepped up on the factors affecting demand and prices of farm products, on long-range economic projections and on improved definition and measurement of parity income.

Foreign Regional Analysis Division—Dr. Quentin M. West, Director. Perhaps best known for its World Food Budget and the related World Agricultural Situation reports, this division is analyzing the structure of world demand for agricultural products and making long-term projections.

Foreign Development and Trade Division—Dr. Kenneth L. Bachman, Director. A major focus is on import-export statistics and research. The most important new research in this division is on factors affecting agricultural development in the less developed countries.

Farm Production Economics Division—Dr. W. B. Sundquist, Director. This division is constructing a "national econometric model" for commercial U.S. agriculture to help answer such questions as: What changes will occur in the total production of major U.S. commodities in the first year and following years under alternative government farm programs? And how would these changes affect resource use and farm incomes? (8)

### CHARTBOOK: OUTLOOK FOR 1966

ECONOMIC RESEARCH SERVICE = U.S. DEPARTMENT OF AGRICULTURE

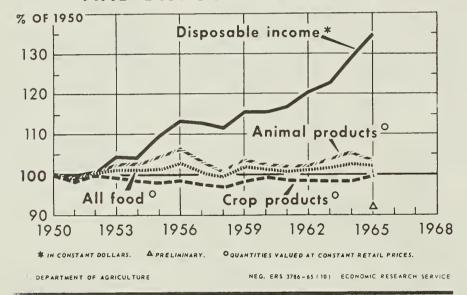


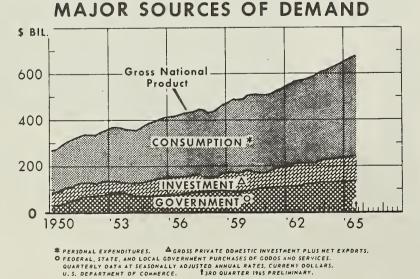
#### FARM FORECAST '66

More money to spend, more persons to spend it together they add up to the strong demand situation which has been the keynote of 1965's economy and may well typify 1966, too. Domestic and foreign demand for farm products are expected to expand in 1966, possibly tobacco will again be available to meet these needs.

Farmers' gross income in 1966 will be up from this year. Total cash receipts may change little with larger receipts for livestock and somewhat smaller for crops. However, there will be a sharp rise in direct payments to farmers. Farm production expenses will be up again and offset much of the increase in realized gross income. Thus, realized net farm income in 1966 will be up a little—possibly one-quarter to one-half billion dollars from 1965's sharply improved level of around \$14 billion.

#### PER CAPITA FOOD CONSUMPTION AND DISPOSABLE INCOME





U. S. DEPARTMENT OF AGRICULTURE

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DISPOSABLE INCOMES TO RISE IN 1966; PER CAPITA FOOD CONSUMPTION TO HOLD STEADY: Per capita disposable incomes have been higher this year than last and are expected to increase even further in 1966. Per capita food consumption is tapering off in 1965. following larger-than-usual increases in 1963 and 1964. Per capita consumption in the coming year is expected to about equal this year's level, but total consumption will rise with increases in population.

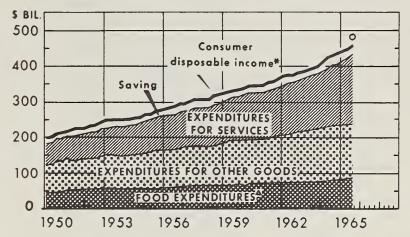
BUSINESS UPSWING TO CONTINUE: The strong advance in economic activity now under way promises to continue in the coming year, possibly at the rapid clip of 1965. GNP is rising sharply this year; consumer expenditures for goods and services are responding to larger personal incomes, and business outlays for plant and equipment are running 13½ per cent above 1964. Government spending is also running higher, partly as a result of increases in defense spending.

HEALTHY ECONOMY SPURS SPENDING: The long-term increases in consumers' disposable incomes is projected to continue through 1966. During the first nine months of 1965 consumers' disposable incomes averaged about 6½ per cent higher than a year earlier. Expenditures for food have been running higher than in 1964 with price advances, particularly for meats, reflecting the strong demand situation and a small reduction in red meat supplies.

FARM VALUE INCREASES: Consumers spent some \$3 billion more for farm originated foods this year than in 1964. High returns to farmers (farm value) resulting from higher farm prices, and an increase in the volume of products marketed account for about \$2 billion of this rise. Total marketing charges were up about \$1 billion.

LABOR AND TRANSPORTATION COSTS HOLD RELATIVELY STEADY: The bill for marketing farm foods in 1964 came to about \$47 billion, \$2 billion more than the year before. Biggest increase over 1963 was in the "Other" component, which includes such costs as packaging, advertising and depreciation on plant and equipment. For 1965 the marketing bill is expected to be around \$48 billion.

#### **INCOME AND EXPENDITURES**



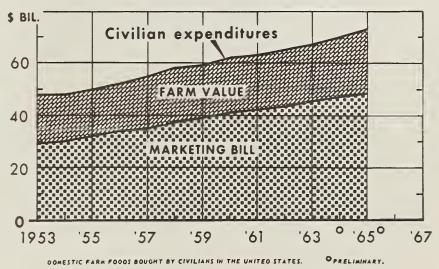
EXCLUDES INTEREST PAID BY CONSUMERS AND PERSONAL TRANSFER PAYMENTS TO FOREIGNERS.

A EXCLUDES ALCOMOLIC BEVERAGES SERIES PARTLY ESTIMATED BY ERS

O THIRD QUARTER 1965 PRELIMINARY

U. S. DEPARTMENT OF COMMERCE

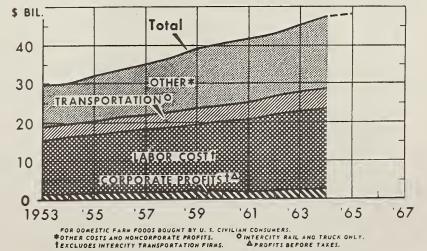
#### FARM VALUE AND TOTAL MARKETING BILL FOR FARM FOODS



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2056-65 (7) ECONOMIC RESEARCH SERVICE

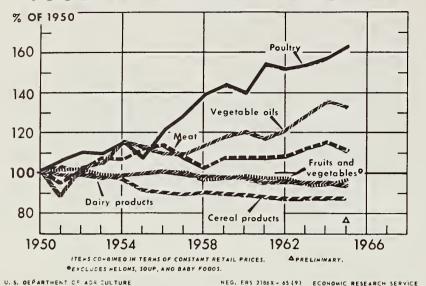
#### COMPONENTS OF TOTAL FARM FOOD MARKETING BILL



U. S. DEPARTMENT OF AGRICULTURE

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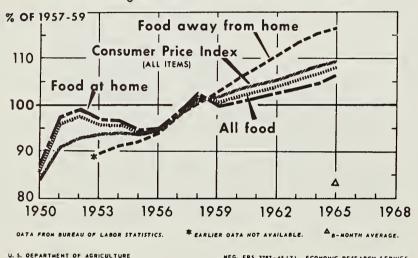
#### FOOD CONSUMPTION PER CAPITA



PER CAPITA FOOD CONSUMPTION STEADY IN 1966: Although per capita food consumption in 1966 is likely to remain steady with this year, some shifts among foods are expected. Potato consumption is expected to increase sharply from the depressed level of 1965. Fruit consumption is likely to increase, too. Poultry meat consumption likely will rise further next year, but per capita consumption of red meat is expected to decline again in 1966.

#### **CONSUMER PRICES**

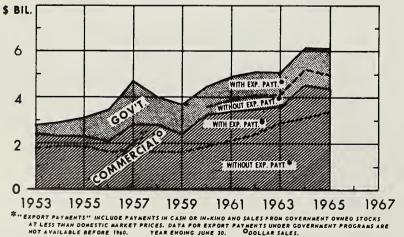
Urban Wage Earners and Clerical Workers



FOOD PRICES UP SLIGHTLY MORE THAN CPI: Retail food prices so far in 1965 have increased slightly faster than has the entire Consumer Price Index. Meat and potato prices are primarily responsible, rising early in the year because of relatively short supplies. But prices of some fresh vegetables and food fats and oils are up, too. So far in 1965 prices of food away from home have not gone up as fast as in the past decade. In contrast, prices of food at home increased faster in 1965 than in recent years.

#### U.S. AGRICULTURAL EXPORTS

Commercial, and Under Specified Government Pragrams With and Withaut Export Payment Assistance



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2493 X - 45 (7) ECONOMIC RESEARCH SERVICE

HEG. ERS 3787-65 (7) ECONOMIC RESEARCH SERVICE

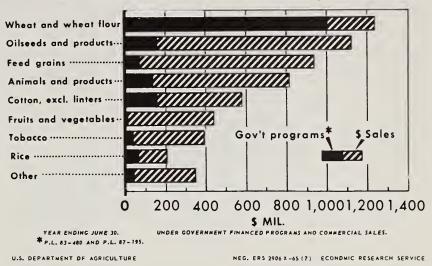
EXPORTS CONTINUE HIGH: Farm exports in fiscal 1965/66 are expected to exceed the \$6.1 billion highs set in 1963/64 and 1964/65. During 1964/65, nearly \$4.4 billion of the total were dollar sales. A new record is likely for dollar sales in 1965/66. The other \$1.7 billion that moved abroad in 1964/65 went mostly to less developed countries under Food-for-Peace programs.

FEED GRAIN, SOYBEAN SHIPMENTS TO INCREASE: Larger exports are in prospect during 1966 for soybeans, feed grains, wheat and tobacco. During fiscal 1964/65, oilseeds and products were our biggest dollar earner in markets abroad, although wheat remained the No. 1 export commodity in terms of total value.

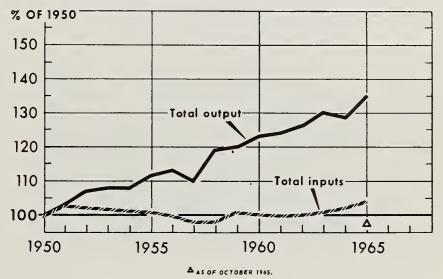
INPUTS UP SLIGHTLY, OUTPUT RISES SHARPLY: Total farm output this year is rising toward a new record. However, total farm inputs are only slightly larger than in 1964. Of course, the composition of these inputs continues to change—labor used in 1965 continued its long-term decline while machinery, fertilizer and lime and other nonfarm inputs were up. Looking ahead, total farm output in 1966 may be slightly below this year's all-time high which is largely the result of record yields per acre.

FEWER HOGS CAUSE DIP IN TOTAL LIVESTOCK OUTPUT: Total output of livestock and products in 1965 may be down slightly from last year's level. Reason: A 9 per cent reduction in hog production has more than offset substantial gains in broiler and turkey output this year. Production of cattle, dairy products and eggs in 1965 is currently running around 1964 levels.

#### U.S. AGRICULTURAL EXPORTS BY COMMODITY GROUP, 1965



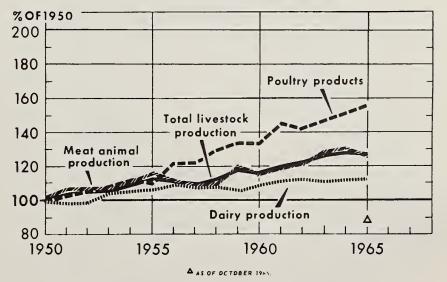
#### FARM OUTPUT AND INPUTS



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 3994-65110) ECONOMIC RESEARCH SERVICE

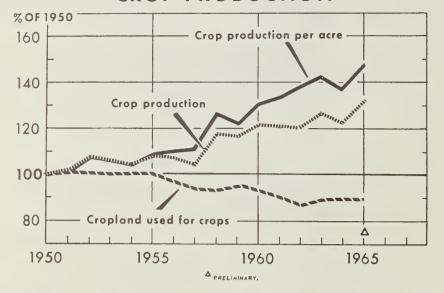
#### LIVESTOCK PRODUCTION



U. S. DEPARTMENT OF AGRICULTURE

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#### CROP PRODUCTION



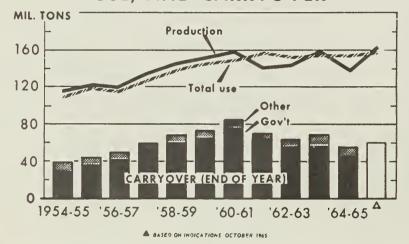
U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 3992-65(10)

ECONOMIC RESEARCH SERVICE

CROP OUTPUT TO SET NEW RECORD: The capacity of agriculture to produce continues to increase, thanks to advances in technology. Indications this October point to record-high crop yields in 1965, about 4 per cent above the high set in 1963. These yield increases likely will push total crop output in 1965 well above all previous levels. Cropland used for crops in 1965 is about the same as in 1964 but is more than 40 million acres below 1950.

### FEED GRAIN PRODUCTION, USE, AND CARRYOVER

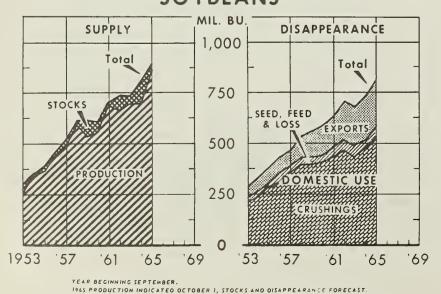


U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 3996-65(10) ECONOMIC RESEARCH SERVICE

FEED GRAIN STOCKS MAY RISE: A record feed grain crop, the result of record yields per acre, is in prospect for 1965. Domestic use during the 1965/66 marketing year is expected to be slightly above levels of the past few years. Exports have been trending steadily upward and may reach an all-time high in 1965/66. However, the large crop is expected to be more than adequate to meet all needs and probably will result in some increase in carryover stocks at the close of the marketing year.

#### SOYBEANS



S. DEPARTMENT OF AGRICULTURE

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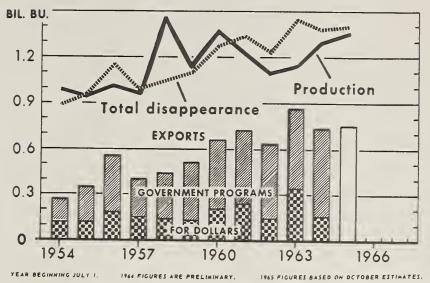
NEW HIGH EXPECTED IN SOYBEAN USE: The long-term uptrend in soybean use is expected to continue into the 1965/66 marketing year as lower soybean prices are likely to stimulate a new high in crushings and exports. Supplies for the 1965/66 year that started September 1 are sharply above last year's levels because of a prospective production increase of 23 per cent.

WHEAT USE TO TOP PRODUCTION: The 1965/66 marketing year may well be the fifth year in succession that total wheat disappearance tops total wheat production. During 1964/65 exports of wheat were the second highest on record, and feeding of wheat expanded sharply as a result of reduced prices for wheat relative to feed grains under the provisions of the wheat program for the 1965 crop.

LARGER COTTON CARRYOVER LIKELY: Cotton yields per harvested acre hit a new high this year. Consequently, total output in 1965 is near last year's levels, despite a slight decrease in harvested acreage. Disappearance of upland cotton in 1965/66 may change only slightly from a year earlier, but the carryover of cotton is expected to rise further to record levels by next August.

FARM PRICES IN 1966 TO AVERAGE AROUND 1965 LEVEL: On the whole, 1966 prices received should average at or near the improved 1965 level. Market prices for larger 1965 crops are averaging below a year ago. Prices may continue lower in 1966 as a result of large carryovers from 1965 and lower price support loan rates. However, livestock prices are expected to hold up well through most of 1966. During 1965 price advances, particularly for meat animals, potatoes and some vegetables, contributed to substantially higher incomes for farmers. Despite the continued increase in the parity index during 1965, the sharp rise in prices received by farmers this year has resulted in an improvement in the parity ratio for the first time since 1959.

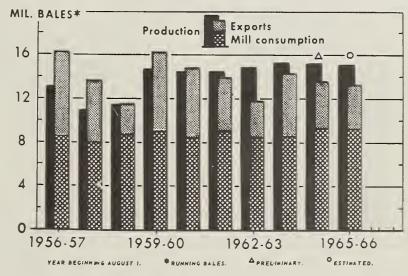
#### WHEAT DISAPPEARANCE



U. S. DEPARTMENT OF AGRICULTURE

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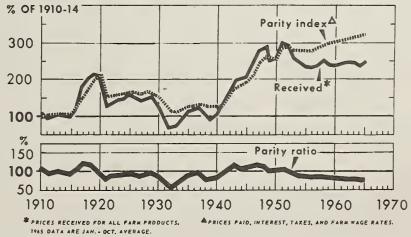
#### U. S. COTTON PRODUCTION AND USE



U. S. DEPARTMENT OF AGRICULTURE

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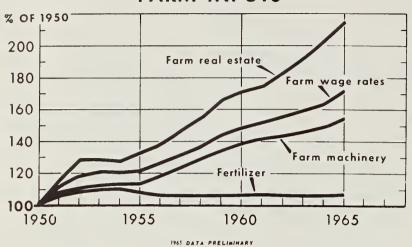
### PRICES RECEIVED BY FARMERS, PARITY INDEX, AND PARITY RATIO



U. S. DEPARTMENT OF AGRICULTURE

NEG. SRS 59- 65 (10) STATISTICAL REPORTING SERVICE

### PRICES OF SELECTED FARM INPUTS

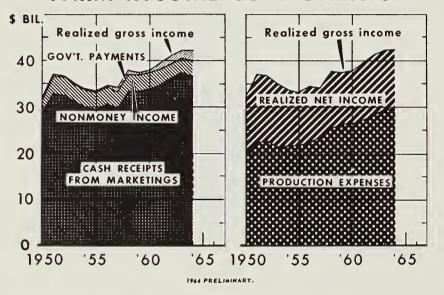


U. S. CEPARTMENT OF AGRICULTURE

NEG. ERS 3995-65 (10) ECONOMIC PESEARCH SER ... TE

paid by farmers for inputs of farm origin, such as land and labor, continued their upward trend this year. Wage rates especially are higher this year than last, but a sharp reduction in the number of hired workers will keep the total labor bill lower in 1965 than in 1964. A breakdown of prices paid for inputs of nonfarm origin shows machinery costs up in 1965 over 1964, fertilizer prices at about the same level.

#### FARM INCOME COMPONENTS

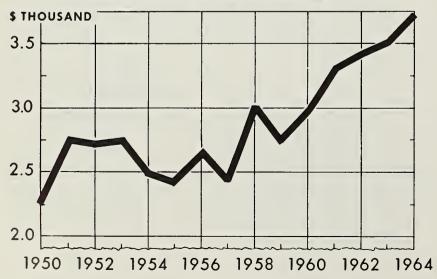


U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 3780-65 (7) ECONOMIC RESEARCH SERVICE

INCOME PROSPECTS EXCELLENT: In general, price and income prospects for 1966 point to another good year with realized net farm income somewhat better than the sharply improved 1965 level. This year has turned out to be an especially good one for farmers and 1966 will likely match or better it. The strong demand situation accompanied by reduced supplies and higher prices for meat animals and some vegetables have pushed 1965 realized net income to its highest level since 1952.

#### REALIZED NET INCOME PER FARM



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2999-65 (10) ECONOMIC RESEARCH SERVICE

HIGHER INCOMES PER FARM: Realized net income per farm in 1965 is expected to total over \$4,100—breaking rather sharply last year's record of \$3,727. The higher income per farm this year and last, due in part to declines in farm numbers, put most farmers in an improved financial position and prospects are good for further improvement in 1966.

#### Payroll Is Bigger, So Are the Bills, When a New Plant Moves Into Town

A factory in the corn field? It isn't such a surprising sight these days.

Many a rural community is making a bid for industries. Their motives are generally the same—to take up the slack in employment that has followed on the heels of technological development on farms.

As inducements to industry, the community may offer industrial sites and plant facilities tailormade to a company's needs.

The community has good reason to think of these as magnets for industry. Although the evidence suggests that these facilities in themselves are not enough to induce a company to move, studies have indicated that availability of buildings and other property ranks high on the list of things a company wants when it decides to shop for a new location. Frequently these developments are funded with industrial development bonds issued by the local government.

Since the interest on the bonds is exempt from federal income tax, the cost of the leased industrial site might be lower than it would be otherwise.

And the facility owned by the local government can be exempted from state or local property taxes, in turn further reducing the cost to the industrial firm.

Then, too, should the firm purchase the bonds, it would receive a flow of tax-free income from that investment, in effect, an investment in its own business.

Amortizing the bonds during the term of the lease, furthermore, can result in a tax advantage comparable to depreciating the building at a faster rate than permitted by federal income tax regulations.

On paper it may look like a fairly simple plan for economic development of equal benefit to the community and to the new industry. In actuality it isn't so simple.

Local industrial development bonds may create financial difficulties for the issuing government. States commonly set a limit on the amount of debt a community can carry in relation to its tax base. Investors, too, want to know about a community's existing debt before they buy additional bonds.

Development bonds may add so much to local debt that the community is unable to finance other needed facilities, such as schools and roads.

Tax concessions, in a variety of forms, are another way the state or local governments may try to attract industry.

The community may, for example, grant an outright exemption for a number of years, commonly five or 10. Such benefits usually apply to new industries. Many states also grant partial exemptions to all industries.

Policies of this sort, however, appear to have little or no weight in a company's decision to relocate. Various studies have indicated that management generally has other things in mind when it decides to develop a new plant. Tax concessions have relatively minor importance.

The final question for rural communities, of course, is what they will get out of their investment in new plants.

A new factory will probably provide jobs, increase incomes for communities where there are large numbers of unemployed.

But the new business will call for greater expenditures by the local government for fire protection, sanitation, traffic control and the like. Such added costs are apt to loom large in a rural area which has previously had only minimal expenditures for these facilities.

Also, the cost to the community will be greater if large numbers of workers must be imported. Again new roads, sewage systems, schools—along with higher tax rates—may be called for with any noticeable rise in population. (10)

### New Reservoirs Hold More Than H<sub>2</sub>O For Farmers Whose Land They Cover

Farmers in the Plum Creek Watershed in Kentucky have discovered that some of their land is worth more as the bottom of a reservoir than as cropland.

Instead of crops, they cultivate customers—fishermen, froggers, boaters and swimmers.

They are the farmers on whose land 11 reservoirs were installed between 1953 and 1961. The reservoirs were part of a watershed protection and flood prevention project authorized for Plum Creek in 1953.

The improvements planned for Plum Creek were designed to overcome three major problems: Frequent flooding of low-lying lands, soil erosion and sedimentation. There had been an average of more than three floods a year in the watershed from 1938 through 1952, with damage averaging more than \$40,000 annually.

The reservoirs helped cut this loss and provided a bonus—a new source of income and recreation.

As each reservoir was finished, the Kentucky Department of Fish and Wildlife stocked it with fish. When fishermen and other visitors began to arrive, some farmers charged fees for the use of their land.

In a recent study of the effects of the watershed project on the economy of the area, ERS estimated annual recreation use of the reservoirs in terms of visitor days as follows: Fishing, 5,460; picnicking, 1,200; boating, 300; and duck hunting, 240. Other visitors have been swimmers, froggers and trappers.

There were no exact figures available on the revenue the recreational use of the reservoirs brought in. But, the researchers estimated that farmers would have had to charge only 54 cents per visitor day in order to equal the value their land once had in agricultural use. (11)

### MIDDLEMEN IN THE MIDDLE OF CHANGE

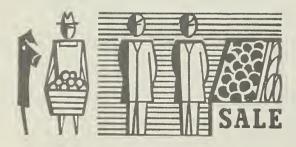
Time was when the farmer was his own middleman; what the consumer paid, the farmer got. Today only a fraction of total farm production is sold directly to the consumer—possibly as little as 2 or 3 per cent of the total.



In 1964 U.S. consumers spent almost \$70 billion for food from U.S. farms, over \$100 billion for food and clothing, tobacco and leather products. The farmer got only about a fourth of this total. The remainder was the value and the cost of the services performed after the products were sold by the farmer.



In 1947 there were an estimated 10.4 million workers on farms while 11.7 million worked in the marketing of farm products. In 1964 the number of marketing workers was up to 13 million; the number of farm workers had dropped to slightly over 6 million.

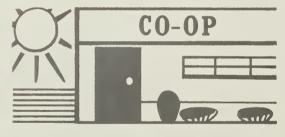


Today's large-scale farmer depends on the marketing system to sell his products. The marketing system needs the bigger farms to work efficiently, to maintain a year-round, large-volume supply.

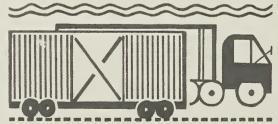
And both require an affluent society to buy the farmer's goods and services added by the marketing system.



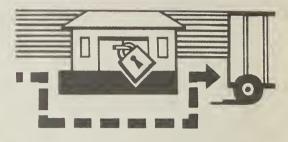
Though individual farmers are less involved with the job of marketing, as a group they are more involved. Farmers use cooperatives to market about a fourth of their products and the percentage is rising. Since 1950, the value of cooperative marketings has increased by 70 per cent; total cash receipts from farm marketings have increased by only a fourth.



Diesel power and larger freight cars, among other developments, have made it possible for the railroads to lower rates. The interstate highway system results in faster, more efficient truck transportation. Inland barge transportation is on the rise with more efficient diesel power and much improved waterways; traffic on one waterway may increase 65 per cent in a few years.



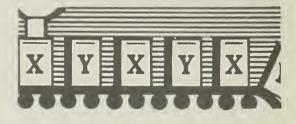
The number of plants assembling farm products for forwarding to the market place is on the decrease; traditional assembly points are being bypassed.



More of our food is processed today, and the plants are getting bigger. The larger processing plants help reduce costs, make possible nationwide merchandising and distribution. The processors are working closer with farmers to insure getting a steady supply of the kinds of products they want.



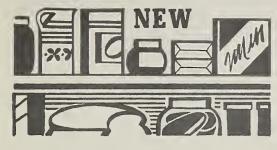
The processors are facing stiffer competition from large-scale retailers. Processors frequently freeze and can products to be sold under the retailers' labels along with their own nationally advertised brands.



The supermarket is probably the single most important influence on the marketing system—on farmers, processors, consumers. Thirty years ago they were almost nonexistent. Even today their actual numbers are a small part of all stores, though they account for most of the sales.



In the past five years the number of items in the typical food store has nearly doubled. There are 7 or 8,000 items instead of 4,000, and in the biggest stores there may be over 10,000. New products appear on the shelves regularly. About half the items stocked today didn't exist 10 years ago.



Food is only part of the retail market. Kitchen supplies, toilet articles and tobacco have long been staples on the shelves. And today's store turns more and more to nonfoods to attract customers. In some super-supermarkets about half the floor space is devoted to department store type goods—clothing, lawn and garden supplies, radios, television sets and furniture.



With more city and suburban dwellers and with more children eating their lunches at school cafeterias, away-from-home eating is becoming a more important part of the marketing system. Also, higher incomes mean more travel, more dining out.



Exports are more important to the marketing system. Today, agricultural exports are about \$6 billion a year; in 1954 they were only \$3 billion. The demands and preferences of customers beyond our borders are taking on increasing importance. (12)

#### **OUTLOOK FOR MARKETING**

#### Good Year for Food Marketing Spurs Bigger Outlay for Plants, Machines

Next year's prospects for the food marketing industry look good.

There'll likely be more farm products to market than ever before, judging from this year's farm output which will probably top 1963's all-time record by nearly 4 per cent.

Consumers are expected to want more food services next year, too. A recent study showed that every time consumer income goes up, people choose to spend more for food services. And consumer income is rising. For the first nine months of 1965 disposable income averaged about 6½ per cent higher than a year earlier. On a per capita basis, income after taxes was five per cent higher in the first nine months of this year than it was during the same period last year.

Then too, with populations growing both here and abroad, there'll be more consumers all around in 1966. Our farm exports have nearly doubled in value in the last decade to a total of \$6.1 billion in fiscal 1965. The export market is expected to remain strong in 1966.

Output of all groups of products made from farm-produced raw materials is higher this year—and the trend is likely to continue in 1966.

The food manufacturing industry turned out a 2 per cent larger volume in the first eight months of 1965 than it did in the same period of 1964. Textile mills produced 10 per cent more fabrics. And the tobacco industry upped output 2 per cent in the first seven months, compared with the like period of 1964.

Reflecting the promising outlook, food and beverage manufacturers are expected to spend \$1.17 billion this year for new plant and equipment. This is 10 per cent more than they spent in 1964. A

billion dollars plus is being invested by the textile industry, a 33 per cent increase over 1964.

Transporters of farm products are investing even larger sums in new plant and equipment. Railroads this year are spending \$1.62 billion; other carriers, \$2.79 billion.

Expenditures of this magnitude help to explain why unit labor costs haven't gone up as fast as hourly wages.

Hourly wages in food marketing jumped 45 per cent from 1954 to 1964, but unit labor costs climbed only 8 per cent. Between 1946 and 1963, output per manhour in food manufacturing rose 3.2 per cent a year on the average.

In food distribution—retailing, wholesaling and away-from-home eating places—output per manhour increased 2.5 per cent a year from 1948 to 1958, and it's probably climbed as fast since then.

Also important in increasing labor productivity has been the investment in education, on-the-job training and the like that pays off in terms of better management and labor performance. (13)

#### What's New In Marketing Research

Each month *The Farm Index* reports announcements of significant new projects to be undertaken by or for the Economic Research Service.

Factors Affecting Spreads Between Farm and Consumer Prices for Livestock and Meats. This is a continuing study of factors that affect retail prices of meat. Basically, economists will analyze changes in the spread between what producers get for livestock and what consumers pay for meat. They'll look at changes in both retail and meat packer costs.

The study is part of ERS's directive from Congress to watch changes in marketing costs that would increase retail meat prices or decrease livestock prices. Annual and supplementary reports are made to Congress. (14)



### ISLAND BOON: THE SUNGLASS ECONOMY

Tourism is creating a whole new economy in some island dependencies in the Caribbean. But other less glamourous territories throughout the Hemisphere must still rely on traditional agriculture and fish.

This winter thousands of weather-weary Americans will seek a few days respite in the tropical sunshine of St. Thomas, Bermuda and Curacao.

The tourist dollars they leave behind should benefit not only the islands but also the taxpayers of the United States, Britain and the Netherlands—mother countries, respectively, of the three island territories. For St. Thomas, Bermuda and, to a lesser extent, Curacao, tourism is a solution to chronic agricultural trade deficits.

But tourism isn't always the answer. The dependent territories of the Western Hemisphere range from the sub-Arctic French islands of St. Pierre and Miquelon off Newfoundland to Britain's Falkland Islands, strategically placed in Antarctic waters off the coast of Argentina.

The two French islands have a substantial fishing industry, thanks to their location off the Grand Banks. The Falklands,

plagued by frigid weather and rocky terrain, have little agriculture or other economic resources to speak of. Sheep raising is the major occupation.

Most of the hemisphere dependencies cluster in the Caribbean. Except for the three Guianas—British, French and Netherlands (Surinam)—off the northeastern bulge of South America and British Honduras in Central America, all are individual islands or island groups.

Based on the new ERS study, here are thumbnail sketches of most of the Caribbean dependencies:

British. Closing in fast on Bermuda's long established lead as a winter mecca for tourists are Antigua and the Bahama chain. Barbados, too, has a growing tourist business but still relies primarily on a one-crop economy—sugar.

The Leeward Islands combine livestock production with a young but growing tourist trade. Even

the stony Cayman Islands, which used to manage largely on the wages of merchant seamen and rope exports, are now attracting the sport shirt set.

The other British territories have been less successful in attracting tourists to bolster or replace sagging sectors of the economy.

For British Guiana agriculture provides three-fifths of all exports, chiefly sugar and rice, and jobs for over half the nation's working force. British Honduras, producing sugar, citrus fruit and lumber for export, nevertheless suffers from a seemingly permanent balance of trade problem because of its dependence on imports.

French. Since 1947, French Guiana, Martinique and Guade-loupe have been Departments of France with the same status as the continental Department of Paris or Lyon. Guiana's subsistence agriculture produces little

surplus for export. To offset a continuing trade deficit Guiana is subsidized by France.

Guadeloupe has high hopes for two new tourist hotels constructed in 1963, but so far sugar and bananas remain its economic mainstays.

Agriculture furnishes 96 per cent of Martinique's exports, and, again, the leading commodities are sugar and bananas.

Dutch. Chief agricultural export of Netherlands Guiana (Surinam) is rice, followed by rubber and coffee. Conversely, the Netherlands Antilles, including Curacao, are semi-arid, offering little encouragement to agriculture. The Antilles have a large oil refining industry and a small but lively tourist trade.

American. After the Philippines, Puerto Rico is the largest U.S. sugar supplier, which means most of the annual sugar crop, its biggest export, is sold to this country. The island's economy is booming as it attracts new industry through tax concessions and other incentives.

In the Virgin Islands agriculture is gradually being replaced by small industry and the tourist trade. (15)

#### **OUTLOOK FOR EXPORTS**

### Dollar Sales Should Be Up, Assisted Shipments Down in Fiscal Year '66

The best year ever is the outlook for U.S. farm exports in fiscal 1966.

Total U.S. exports of farm products may exceed the \$6.1 billion high of the past two fiscal years.

Dollar sales are expected to be somewhat larger than the \$4.4 billion of fiscal 1965.

Conversely, exports under government-financed programs—primarily Food-for-Peace—may drop slightly below last year's \$1.7 billion.

Turning to individual commodity groups, exports are expected to be higher this year than last for corn, grain sorghums, wheat, soybeans, fruits, variety meats, tobacco, hides and skins.

On the other hand, we'll probably ship somewhat smaller quantities of cotton, dried beans, vegetables, dairy products, lard, beef and veal.

Animals and products. Exports in this category should be down slightly this fiscal year from the \$818 million recorded last year.

The slight overall value decline will be due chiefly to smaller exports of dairy products, animal fats, beef, veal and pork.

Grains and preparations. Exports of U.S. feed grains to supply fast growing livestock industries in western Europe and Japan will likely push this category to record levels. At 21 million metric tons, total exports would top last year's record by 3 million tons.

Cotton. Exports may fall slightly below the 4.5 million shipped in fiscal 1965. U.S. cotton continues to run into strong competition from other free world producers. Also, importing countries are still working down stocks bought previously. The expected reduction in stocks reflects uncertainty about world cotton prices during the 1966/67 crop year.

Fruits and preparations. Exports may be slightly over last year's \$289 million. Most of the increase should be in oranges, reflecting the good Florida harvest.

Oilseeds and products. For the seventh straight year a new record is expected for this group in fiscal 1966. Soybeans, like feed grains for the livestock industries of western Europe and Japan, will set the pace. (16)

#### Foreign Spotlight

SOVIET UNION. No matter what decisions Kremlin leaders may make to improve agriculture, the weather is the chief policymaker in the Soviet Union in the short run.

The new leadership increased farm prices and incentives to encourage farmers to grow more last year. It's putting more money into machinery, fertilizer and other capital inputs. And it's giving more favored treatment to people on state and collective farms who also cultivate small private plots.

Yet the 1965 grain crop is well below that of 1964. The big factor has been the weather. Last year weather conditions generally were well above average and the Soviets got a good grain harvest. This year weather conditions were

worse than usual—in some cases almost as bad as 1963—and the crop suffered. Still, the 1965 output is somewhat better than 1963 when drought virtually wiped out the crop in the New Lands east of the Urals.

The 1963 grain failure forced the Kremlin to buy heavily in world markets. Although very good, the 1964 crop didn't allow for rebuilding depleted stocks. Thus, with the 1965 harvest below expectations, although far better than 1963, the Soviets are again importing large quantities of grain this year.

However, given several years of more normal weather and assuming the new programs for agriculture succeed in raising grain yields, the Soviet Union may be able to regain its traditional position as a net exporter of grains, perhaps by 1970. (17)

THE BALANCE SHEET OF AGRICULTURE 1965. N. J. Wall, Farm Production Economics Division. Agr. Info. Bul. 290.

Assets and liabilities of U.S. agriculture as though it were one large enterprise are brought together in this report. The value of farm assets increased in 1964 by nearly 4 per cent over the previous year. Other increases are also shown in net farm income, cash receipts and expenses. Gross farm income from production dropped.

THE HISTORICAL EVOLUTION OF DEVELOPMENT CREDIT—THE EMERGENCY PERIOD. R. A. Christiansen, Farm Production Economics Division, in cooperation with Sydney D. Staniforth, Department of Agricultural Economics, University of Wisconsin, Madison. Wis. Univ. Ag. Econ. 43.

This is a report on the drought years of the '30s which provided the need for a re-examination of the role of credit in agricultural development.

U.S. FOOD CONSUMPTION—SOURCES OF DATA AND TRENDS, 1909-63. Food Consumption and Utilization Section, Economic and Statistical Analysis Division. Statis. Bul. 364.

This report contains the annual per capita food consumption estimates for the U.S. civilian population, the nutritive values of this food, the total annual food supply and use, and an explanation of the derivation of consumption estimates.

ESTIMATED NUMBER OF DAYS' SUPPLY OF FOOD AND BEVERAGES IN ESTABLISHMENTS THAT SERVE FOOD FOR ON-PREMISE CONSUMPTION—A CIVIL DEFENSE STUDY. M. G. Van Dress, Marketing Economics Division. MRR-707.

INVENTORY OF FOOD PRODUCTS AND BEVERAGES IN ESTABLISHMENTS THAT SERVE FOOD FOR ON-PREMISE CONSUMPTION. M. G. Van Dress, Marketing Economics Division. Supplement to MRR-707.



### recent publications

The publications listed here are issued by the Economic Research Service and cooperatively by the state universities and colleges. Unless otherwise noted, reports listed here and under Sources are published by ERS. Single copies are available free from The Farm Index, OMS, U.S. Department of Agriculture, Washington, D. C., 20250. State publications may be obtained only by writing to the issuing experiment station or university after the title.

These reports estimate the supply of food products and nonconcentrated fluids on inventory in away-from-home eating establishments in the 50 states. Food stocks are shown by storage type, major food group and kind of business. Data are from 1964.

MARKETING FLOWERS: CREDIT AND FINANCING PROBLEMS OF RETAIL AND WHOLESALE FLORISTS IN FOUR IOWA CITIES. J. V. Powell and V. G. Edman, Marketing Economics Division. MRR-704.

This study was conducted to determine the nature of florists' financing problems and the seriousness of their financial losses from noncollectable accounts. (See June 1965 Farm Index.)

MANAGERIAL ASPECTS OF LEAST-COST FEED FORMULATION WITH LINEAR PROGRAMMING. S. H. Stafford and L. E. Ott, Marketing Economics Division. MRR-729.

This report shows that when properly used, linear programing (LP) can be a valuable management tool for computing feed formulas, anticipating changes in ingredient usage rates and developing feed specifications. Gross savings of \$1.70 per ton were attributed to the use of LP during a 23-week test in two firms.

ECONOMIES OF SIZE ON IRRIGATED COTTON FARMS OF THE TEXAS HIGH PLAINS. J. P. Madden and B. Davis, Farm Production Economics Division, in cooperation with Texas A&M University, College Station. Tex. Agr. Expt. Sta. B-1037.

Findings of this report show that the one-man farm with adequate capital can be as efficient as any larger size of farm. The synthetic firm approach was used in this analysis. Several different crops and livestock enterprises and various cultural practices were included in the analysis. Recent trends indicate that cotton farms in the Texas High Plains are extending their acreage beyond the least-cost point at 440 acres of farmland.

A PROGRAMMING ANALYSIS OF INTER-REGIONAL COMPETITION AND SURPLUS CAPACITY OF AMERICAN AGRICULTURE. E. O. Heady and N. K. Whittlesey, Iowa State University Agricultural and Home Economics Experiment Station, Ames, in cooperation with the Farm Production Economics Division. Iowa Agr. and Home Econ. Expt. Sta. Bul. 538.

Emphasis is placed on interregional allocations of production for wheat, feed grains, cotton and soybeans and on the flow of products among consuming regions. The report emphasizes interregional competition and surplus agricultural capacity estimated to exist in 1965. Analysis is made by several linear programing models.

SUPPLEMENT FOR 1965 TO LIVE-STOCK-FEED RELATIONSHIPS 1909-1964. E. F. Hodges, Farm Production Economics Division. Supplement for 1965 to Statis. Bul. 337.

Significant changes in livestock feed relationships occurred during the last three years. While livestock prices in 1956-62 were high in relation to feed prices, the reverse situation prevailed during most of 1963 and 1964.

THE HIRED FARM WORKING FORCE OF 1964—A STATISTICAL REPORT. G. K. Bowles, Economic and Statistical Analysis Division. AER-82.

Information on the size and composition of the 1964 hired farm working force and the employment and cash earnings from farm and nonfarm wage work obtained during the year has been put into statistical tables in this report. (See October 1965 Farm Index.)

ESTIMATED NUMBER OF DAYS' SUPPLY OF FOOD AND BEVERAGES IN RETAIL FOOD STORES, 1963—A CIVIL DEFENSE STUDY. E. C. Pape, Jr. and M. G. Van Dress, Marketing Economics Division. MRR-713.

On the basis of 2,000 calories a day, there was a 15.1-day supply of food and a 3.3-day supply of beverages in retail food stores in 1963 for each person in the 48 contiguous states. (See October 1965 Farm Index.)

THE AGRICULTURAL ECONOMY OF IRAQ. H. C. Treakle, Foreign Regional Analysis Division. ERS-For. 125.

Agricultural products in 1962

accounted for 95 per cent of the value of all Iraqi exports, excluding oil, and over 22 per cent of total imports. In recent years the U.S. has been active in agricultural trade with Iraq. In 1962 the U.S. was the second largest purchaser and supplier of farm products. (See June 1965 Farm Index.)

WOOL STATISTICS AND RELATED DATA 1920-1964. M. V. Jones, Economic and Statistical Analysis Division. Statis. Bul. No. 363.

Emphasis is given to long-term series which indicate basic trends affecting production, consumption, prices and international trade in wool and other animal fibers. The data are presented in tabular form.

NET MIGRATION OF THE POPULATION, 1950-60 BY AGE, SEX AND COLOR, VOL. 1. G. K. Bowles, Economic and Statistical Analysis Division, and J. D. Tarver, Department of Sociology, Oklahoma State University. In six parts, \$1.25 each from Superintendent of Documents, U.S. Gov't. Printing Office, Washington, D. C. 20402.

This tabular report estimates population changes because of migration by age and sex, and by color where appropriate, for states, counties, economic areas and metropolitan areas for the period 1950-60. Information is divided into six booklets: (1) Northeastern States, (2) North Central States, (3) South Atlantic States, (4) East South Central States, (5) West South Central States and (6) Western States.

THE EFFECT OF WEATHER AND TECHNOLOGY ON CORN YIELDS IN THE CORN BELT, 1929-62. L. H. Shaw, Development and Trade Analysis Division, and D. D. Durost, Farm Production Economics Division. AER-80.

This study shows that the use of better varieties of corn and improved cultivation and fertilization practices have reduced variation in yields in both good and bad weather. Improved technology, therefore, has resulted in relatively stable corn yields.

CONVENIENCE FOODS: THE RELATIONSHIP BETWEEN SALES VOLUME AND FACTORS INFLUENCING DEMAND. H. H. Harp and M. E. Miller, Marketing Economics Division. AER-81.

This report identifies measureable factors associated with sales volume of foods and gives an equation based on these factors which may be of use in predicting success of new products.

INGREDIENT HANDLING BY FEED MANUFACTURERS—CAPITAL AND LABOR REQUIREMENTS. C. J. Vosloh, Jr., Marketing Economics Division. MRR-727.

This study helps management to make decisions concerning the operating efficiency of their receiving centers. In developing guidelines for planning new or remodeling existing feed mills with automated methods, the primary objectives are: (1) to reduce labor per ton for receiving materials while maintaining their quality and (2) to improve the overall efficiency of the mills.

#### Numbers in parentheses at end of stories refer to sources listed below:

1. R. Nikolitch, The Expanding and the Contracting Sectors of American Agriculture, AER-74 (P); 2. R. Nikolitch (SM); 3. K. E. Blase and R. Bird, Developing Adequate Farms in the Eastern Ozarks of Missouri, Mo. Agr. Expt. Sta. Res. Bul. 888 (P\*); 4. Statistical Reporting Service, Number of Farms and Land in Farms, SpSy 3 (1-65) (P); 5. H. G. Sitler, Costs of Selected Sizes and Types of Farm Machinery on Colorado Wheat Farms, Colo. Agr. Expt. Sta. Unnumb. (P\*); 6. W. N. Schaller and G. W. Dean, Predicting Regional Crop Production, Tech. Bul. 1329 (P); 7. W. L. Gibson, Jr. and A. J. Walrath (SM); 8. Div. of Inf., OMS; 10. H. Shapiro, Local Govern-

ment Financing of Industrial Development (M); 11. A. B. Daugherty, Watershed Program Evaluation, Plum Creek, Kentucky, ERS-243 (P); 12. K. E. Ogren (SM); 13. R. E. Olson (SM); 14. W. C. Motes (SM); 15. A. G. Sanderson, Notes on the Agricultural Economies of Dependent Territories in the Western Hemisphere, ERS-For. 136 (P); 16. R. L. Tontz (SM); 17. H. E. Walters (SM); 18. J. V. Powell, Trends in the Retail Florist Industry, Unnumb. (P).

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Speech (S); published report (P); unpublished manuscript (M); special material (SM); \*State publications may be obtained only by writing to the experiment station or university cited.

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#### Sales Bouquet

The nation's retail florists sold nearly \$800 million worth of flowers in 1963, an increase of more than 20 per cent over 1958.

However, only 625 new firms opened shop during the 5-year period, an increase of 3 per cent for a 1963 total of 19,801 retail florists nationwide.

Actually, 22 states lost firms during the period, ranging from a 1 per cent drop in California and Pennsylvania to a 28 per cent decline in Alaska. But only Alaska and Oregon had a fall-off in value of sales. This indicates that individual shops are larger than they were in the late 1950s.

Still, higher dollar sales don't mean that florists are selling more flowers. Sales volume has remained relatively stable in recent years. Nor has the cost to florists of flowers they sell at retail fluctuated much.

What's happened is that, like most industries, florists pay higher rent for ships, higher wages to employees, higher charges for repairs and other services than they did in 1958. In turn, florists charge more for cut flowers and other floral arrangements than in 1958.

ERS economists also note a trend toward incorporated businesses, a sign perhaps that the industry is becoming more stable. Despite the 625 increase in number of firms, there were 452 fewer active proprietors of unincorporated shops in 1963 than in 1958.

These changes are based on preliminary state reports of the 1963 Census of Business. Later tabulations should give a clearer picture of the industry. (18)

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The contents of this magazine are based largely on research of the Economic Research Service and on material developed in cooperation with state agricultural experiment stations. All articles may be reprinted without permission. For information about the contents, write the editor. The Farm Index, Office of Management Services, U.S. Department of Agriculture, Washington, D. C. 20250. Use of funds for printing this publication approved by the Director of the Bureau of the Budget, May 24, 1962. Subscription orders should be sent to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price 20 cents (single copy). Subscription price: \$2.00 per year; 75 cents additional for foreign mailing.

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